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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,067	07/06/2001	Young Jo Lee	K-277	3188
34610	7590	01/24/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			D AGOSTA, STEPHEN M	
			ART UNIT	PAPER NUMBER
			2683	

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/899,067	Applicant(s) LEE ET AL.	
	Examiner Stephen M. D'Agosta	Art Unit 2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-8,35,38-40,48-83 and 1014 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,4-8,10-14,35,38-40,53-64 and 75-83 is/are allowed.
- 6) ☒ Claim(s) 48,49,65-67,73 and 74 is/are rejected.
- 7) ☒ Claim(s) 50-52 and 68-72 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/04 and 8/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claim 1-83 have been considered but are moot in view of the new ground(s) of rejection.

1. **Claims 1, 4-8, 10-14, 35, 38-40, 53-64 and 75-83 are allowed.**
2. The examiner notes that claims 52 and 63 are not multi-dependent as written.
3. The examiner notes that the allowed claims referenced in #1 above are novel based on the detail presented whereas the rejected claims continue to be written in a broad fashion and are open to broad interpretation by the examiner, hence his new rejection. New claims 48-83 were added by amendment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 48-49 rejected under 35 U.S.C. 103(a) as being unpatentable over Blakeney II et al. US 5,640,414 and further in view of Fredrik et al. WO99-60809 (hereafter Blakeney and Fredrik).

As per **claim 48**, Blakeney teaches a soft handoff method (title, which includes UHDM's depending upon the system) comprising simultaneous connections to multiple BTS's (figure 1) which may use identical code patterns **but is silent on**;

- a) a field for providing a prescribed time for swapping first/second encoders,
- b) a first indicator "time" field" to swap
- c) wherein each BTS uses one of first/second turbo encoder types and UNDM is sent during soft handoff.

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Fredrik teaches coded allocation for sectorized communications (title) whereby a mobile can roam among different code sets in a CDMA system (figure 7c) and that allocation of codes/code sets may change over time to support handoff (abstract). Hence first/second code patterns would be used to support the mobile as it roams which reads on allocating/receiving/changing codes sets in the limitation above.

Also Fredrik teaches changing code sets as the user roams which reads on a "prescribed time" since both the mobile and BTS need to use the same code set at the same time for communications to be supported.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Blakeney, such that steps a-c are used, to provide means for determining a "time" field that is transmitted to inform the system when to switch encoder types during a handoff.

As per **claim 49**, Blakeney is **silent on** the time units being system time.

The examiner takes **Official Notice** that "system clocks" are well known in the art and are used to ensure that all users/components are synched to one clock (eg. a cesium beam clock is an example).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Blakeney, such that system time is used, to provide means for all components to use one clocking standard by which to follow.

Claim 65 rejected under 35 U.S.C. 103(a) as being unpatentable over Blakeney/Frederick and further in view of Yi US 5,978,365.

As per **claim 65**, Blakeney teaches a method to perform CCSH with at least two BTS's using a same puncturing pattern type with a mobile in a handoff region (title and abstract teaches messages from mobile to network components), comprising:

But is silent on

Transmitting a message from one BTS to a mobile when a puncturing pattern type of one of the BTSs needs to be changed to a different pattern

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Changing the current patter type to a different pattern according to information of the message.

Yi teaches use of first/second code puncturers in a CDMA system used for handoff operations (see abstract and claims 1-38).

Fredrik teaches use of multiple code sets which requires both mobile and network to understand which pattern to use and when (which reads on the limitations regarding switching indicators/time).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Blakeney, such that a UHDM and action field is used to change patterns, to provide handoff information/pattern changes via an industry standard message.

Claims 66-67 and 73-74 rejected under 35 U.S.C. 103(a) as being unpatentable over Blakeney/Fredrik and further in view of Lin US 6,542,744.

As per **claims 66 and 73**, Blakeney is **silent on** a UHDM.

Lin teaches Three Handoff Direction Messages exist, with the applicable message being determined by the cellular network type or the mobile phone type. The first is an IS-95A Extended Handoff Direction Message which is defined in the publication "Mobile Station-Base Station Compatibility Standard for Dual-Mode Wideband Spread Spectrum Cellular System," document TIA/EIA/IS95-A, available from the Telecommunications Industry Association (TIA) and the Electronic Industries Association (EIA). The second message is an IS-95B General Handoff Direction Message, defined in "Mobile Station-Base Station Compatibility Standard for Dual-Mode Spread Spectrum Systems," document TIA/EIA-95-B, ANSI Publication version, December 1998. The third message is an IS-95C Universal Handoff Direction Message (commonly referred to as IS-2000), defined in "Introduction to cdma2000 Standards for Spread Spectrum Systems," document TIA/EIA/IS-2000.5-A, March 2000. (C6, L22-39).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Blakeney, such that a UHDM message is used, to

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provide means for using standard message formats already in use in the cellular community.

As per **claims 67 and 74**, Blakeney is **silent on** wherein the message comprises a changing time field to inform a time to change to a different puncturing pattern.

Fredrik teaches changing code sets (eg. puncture patterns) as the user roams which reads on a "prescribed time" since both the mobile and BTS need to use the same code set at the same time for communications to be supported.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Blakeney, such that puncture patterns are changed at prescribed time, to provide means for both mobile and network to simultaneously change at the same time to the same pattern.

Allowable Subject Matter

Claims 50-52 and 68-72 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims recite highly detailed designs not found in the prior art of record and are novel in the examiner's opinion.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta
1-13-05



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600